

Futureproofing Faculties of Education in Australian Regional Universities: Three Sites of Pressure and Possibility

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Abstract

Australian regional universities operate at the intersection of multiple and conflicting discourses, seeking to engage potentially disenfranchised learners outside the metropolis yet possessing less cultural and financial capital than their metropolitan counterparts. So too with faculties of education in such universities, which fulfil a crucial role in preparing future teachers while being positioned at a distance from ‘pure’ research, thereby highlighting their somewhat ambiguous legitimacy. Many of these competing discourses are evident in the final report of the Bradley Review of Australian higher education (Commonwealth of Australia, 2008), which contains some useful ideas for regional universities to consider but devalues the vital part played by cultural, geographical and physical place in framing those universities’ interactions with their local communities.

This article explores three sites of pressure and possibility in helping to futureproof faculties of education in Australian regional universities against this kind of devaluation. These sites are centred on distinctive and valuable contributions in the areas of teacher education programs, teacher education student support and doctoral education. This exploration is underpinned conceptually by the interplay between human capital (mentioned in the Bradley Review) and social capital (not acknowledged in the Review but fundamental to recognising the service of regional faculties of education to multiple stakeholders and their significant function in building both types of capital). The authors argue that this interplay lies at the heart of helping to sustain regional communities and the nation as a whole.

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Introduction

The Bradley Review of Australian higher education (Commonwealth of Australia, 2008) is the latest in a long line of inquiries into Australian universities (see for example, Commonwealth of Australia, 1998; Martin, 1964; Murray, 1957). While the Review is exercising the minds of the current Federal Government across multiple domains, our concern here is with its possible implications for the meeting

place between two crucial fields of contemporary Australian higher education: teacher education and regional universities. Separately and in combination, these fields are vital to Australia's continued prosperity and future sustainability, yet the former is mentioned in only one line of the Review's final report, while the latter are positioned in ways that reflect a degree of urbancentrism and a rather narrow understanding of the costs and benefits of funding regional universities.

Thus the *Bradley Review* (Commonwealth of Australia, 2008) encapsulates – and in itself represents – both challenges and opportunities for Australian regional universities. If these challenges are to be minimised and these opportunities mobilised, the distinctive needs, contributions and aspirations of those universities must be clearly defined and outlined, in order to maximise regional university futures in Australia and thereby to enhance the survival and indeed flourishing of the regional and other communities with which they are interdependent. This paper assists in that exercise by focusing on the pressures and possibilities of three sites of futureproofing Australian regional university faculties of education: teacher education programs, teacher education student support and doctoral education.

The paper consists of three sections:

- A selective literature review about Australian regional universities and a conceptual framework centred on human capital and social capital
- The three sites of activity as evidenced by current developments and future trends in an Australian regional university
- Concluding implications of those developments and trends for helping to futureproof Australian regional universities and their faculties of education more broadly

We argue that attending to these pressures and possibilities is beneficial and significant not only for regional Australia but also for the nation as a whole.

Literature review and conceptual framework

There is general agreement that universities constitute centres of various dimensions of capital at the same time that they contribute directly to the capital acquisition of the students and staff members associated with them (Mueller, 2006; Smith, Beaulieu, & Seraphine, 2010). A key corollary of this proposition is that regional universities are vital to ensuring the survival and sustainability of their respective regional communities (Lundvall, 2008). These communities are often positioned as less prosperous and stable than their urban counterparts, and hence as being in need of renewal and regeneration (Morgan, 2007), and also have distinctive challenges and opportunities related to innovation and networking (D'Este & Patel, 2007; Etzkowitz & Klofsten, 2005; Tödtling & Trippl, 2005).

In the Australian context, several scholars have explored the particular connections between regional universities and their multiple communities. Examples include the facilitation of opportunities for mature age learners to transition into university study in northern Victoria (Townsend & Delves, 2009) and the elaboration of an effective partnership between a regional university and a rural technical and further education college in western New South Wales (Mlcek, 2009). Other instances have encompassed the development of a regional theatre in southern Queensland (McDonald, 2006), the establishment of a learning community through university-

initiated research projects in Tasmania (Kilpatrick, Jones, & Barrett, 2006) and the identified implications of Australian regional universities for extending contemporary understandings of what a university is and should be (Schirato, 2006).

These and other accounts of Australian regional universities have been underpinned, with varying degrees of explicitness, by different notions of capital, from cultural to economic to political to symbolic. Here we are interested in two specific forms of capital that we use to inform the discussion in the next section of the paper: human and social. Human capital theory is predicated on the contributions by individuals and groups to economic capital, and is closely associated with such key elements of economic activity as literacy linked with prosperity (Becker & Woessmann, 2009), the success or otherwise of venture capital firms (Dimov & Shepherd, 2005) and wage determination (Preston, 2007). By contrast, social capital “refers to sociability, social networks and social support, trust, reciprocity, and community and civic engagement” (Morrow, 1999, p. 744), as well as to “the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintances and recognition” (Bourdieu & Wacquant, 1992, p. 119). Social capital has been deployed to investigate United States university students’ uses of online social networking sites (Ellison, Steinfield, & Lampe, 2007) and the knowledge networks clustered around secondary schools in western Sydney (Steele, 2009), and also to underpin health and family policy (Leeder & Dominello, 1999) and community development (Labonte, 1999).

Specifically in relation to Australian universities and their futures, the conceptual interplay between human capital and social capital is revealing and instructive. As we noted above, the Bradley Review (Commonwealth of Australia, 2008) did not refer to social capital, and discussion of human capital emphasised its contribution to economic prosperity. For example, the Review highlighted the link between “Australia’s human capital” and enhanced “national productivity and global competitiveness” (p. 27); it cited the submission by the Indigenous Higher Education Advisory Council that Indigenous people “bring significant strengths, both in knowledge capital and human capital[,] that enriches higher education in Australia” (p. 32); and connected income support for university students with augmenting “the human capital outcomes in terms of the quality and diversity of skills and qualifications from university and other tertiary education” (p. 47).

By contrast, social capital has been mobilised to explain how different groups of stakeholders associated with Australian regional universities have been able to develop resilience and to resist strategies of marginalisation that would otherwise restrict their academic success and reduce their life chances. For instance, social capital was demonstrated as assisting groups of pre-undergraduate students in a preparatory program at a regional university to achieve their potential as lifelong learners (Danaher, Coombes, Danaher, & Anteliz, 2000), as well as enabling that program to build on principles of social entrepreneurship and thereby to transform the regional community to which it belonged (McConachie & Simpson, 2003). Likewise social capital was found to underpin the design of, and students’ responses to, two distance and online teacher education courses at a different regional university (Danaher, 2006). While we acknowledge critiques of social capital (Daly & Silver, 2008; Labonte, 1999), we concur with Smyth and Down’s (2004) summation of the difference between social capital and human capital – a difference that we explore in the next section of the paper:

In contrast to narrowly conceived human capital approaches to education, social capital emphasises the importance of building relationships, the strength of mutual obligation and civic engagement and the quality of life as the cornerstones of creating socially just communities ... (p. 51)

Three sites of pressure and possibility

We turn now to apply this conceptual interplay between human capital and social capital to what we have identified as three sites of pressure and possibility in a faculty of education in an Australian regional university. Despite the diversity of the selected sites – teacher education programs, teacher education student support and doctoral education – they are united by their perceived significance in helping to futureproof Australian regional universities and their faculties of education against the excessive application of human capital theory. Specifically this is achieved by each site's intended contribution to building and sustaining the social capital of students and their families, academics, administrators and other members of and stakeholders in the university's multiple communities.

Teacher education programs

In 2007, the Faculty of Education at the authors' university embarked on a process of reconsidering and refreshing its position and contribution to its university vision and the profession more broadly. The aims were to ensure that the faculty continued to be well situated for the future locally, nationally and internationally, and that it continued to contribute to the development of both human and social capital in its region. The challenge was ensuring that the faculty, a comprehensive provider of education for all levels from early learning years through to adult learners, could best enhance its profile and shape a distinctive position as a provider of quality education and convey to the profession what it could expect its graduates to 'look like'. The program of reconceptualisation was informed by a set of distinctive principles arrived at through consultation forums with various key stakeholder groups including Education Queensland, the Queensland Department of Education and the Arts, Catholic Education, school principals and the Queensland College of Teachers as well as academic staff and students from the faculty. These principles now underpin the program structures and content and shape faculty practice. They are premised on the goal of the faculty preparing *global educators for contemporary learning communities*. This approach makes explicit an agenda of preparing educators, which extends beyond classroom teachers, and also for learning communities, which goes beyond schools to take in early learning centres, disability services and adult, technical and training learning environments. This approach also recognises the need for this preparation to ensure global and contemporary relevance so that graduates can 'hit the ground running' wherever they may be employed.

A central imperative to the reconceptualisation was the need to provide students with a flexible suite of contemporary programs with a range of available exit points delivered in multiple ways including online and on-campus and via distance mode.

The process was informed by the multitude of reviews of teacher education since the 1980s. In Australia alone, these reviews have included major national inquiries such as: *A Class Act* (Senate Employment, Education and Training Reference Committee, 1998); *Preparing a Profession* (Australian Council of Deans of Education, 1998); *Quality Matters: Revitalising Teaching: Critical Times, Critical Choices: Report of the Review of Teacher Education* (Ramsey 2000); *Australia's*

Teachers: Australia's Future (Committee for the Review of Teaching and Teacher Education, 2003); and most recently *Top of the Class* (House of Representatives Standing Committee on Education and Vocational Training, 2007). There is no shortage of commentary on teacher education in Australia and elsewhere. A considerable body of research identifies the key features of programs that are deemed (by a wide range of criteria and definitions) to represent 'quality' in initial teacher education (for example, Darling-Hammond & Bransford, 2005; Feiman-Nemser, 2001). Taken together, these major studies reveal a degree of consensus on the key characteristics of quality programs of initial teacher education. The prevalent concept is that of a strong partnership with professional experience schools in which faculty and expert school-based mentors collaborate in their work with pre-service teachers and model approaches to teaching that are consistent with the program philosophy. This is, regardless of whether this is reflected in the inclusion of either an extended period of intensive professional experience or a graduated sequence of developmental professional experience placements.

From that perspective, a new approach to professional experience was instigated in the faculty, with a view to developing enhanced partnerships and understandings between host schools and the faculty, which are deemed so critical to the success of any professional experience program. To that end, the faculty has nominated each academic staff member to be a liaison person for at least one local school. Thus far, this initiative has resulted in two large-scale action research projects involving academics, teachers, student teachers and school students. Professional placements are built into every year and connected to course content. Opportunities are available for students to undertake a professional placement in an overseas location (Thailand, Malaysia or the United States) as well as a rural and remote location in Queensland.

A key outcome of the program reconceptualisation – especially the development of a suite of 11 common core courses for all students regardless of the education level in which they are specialising – is the ability to respond quickly to market demands. The structure provides sufficient flexibility for the faculty to drop or add specialisations according to employability trends; furthermore, it provides students with some flexibility, in that they are able to defer having to make a final career choice/decision until the end of semester one – that is, to follow early childhood, primary, special education or secondary teaching.

The faculty firmly plays an educational leadership role in its regions. It has built strategic community partnerships and proactively contributes wherever practicable and possible to regional development and thus contributes to the social capital of the education profession and its multiple stakeholders. The faculty's purposeful goal of preparing global educators recognises the effects of globalisation as a major influence on the higher education sector. The fact that the faculty delivers its programs to students in over 100 countries provides rich opportunities for social interconnectedness between academic staff and students.

Contributions to education by the faculty start at the early childhood level. It has been recognised both federally and at the state level that investment in early childhood development provides benefits to our communities and the Australian economy. The faculty is well-placed to contribute to the set of targets agreed to by all governments, including widespread access to early learning by 2013 for all children in the year before formal schooling, and that all Indigenous four-year-olds in remote Indigenous communities will have access to a quality early childhood education program within the next five years.

Furthermore, success at school is positively associated with higher levels of employment and labour force participation. As the only university provider of education for all levels from early childhood through to adult learning within a large regional area, the faculty can resultantly be said to be a major player in contributing to higher levels of productivity and social advancement in its region and helping to build social capital. By way of example, the faculty contributed to a Commonwealth Department of Education, Employment and Workplace Relations sponsored *School to University Pathways Project* for the local Indigenous community. This project has added substantively to the development of social capital in the region amongst multiple groups. The project occurred in four overlapping stages, namely: the development of networks and relationships; engagement with individual students within schools; bringing students into the university context for more intensive engagement; and finally engaging with faculty undergraduate students as future teachers of Indigenous students. The project team undertook an intensive program of engagement and networking with stakeholders, including Education Queensland, Queensland Health, over 40 schools, and Indigenous community organisations and elders. The project team talked with principals, teachers and students and provided both generic information about university study and one-on-one engagement with students. The project connects on an individual or small group basis with over 120 secondary school students. The faculty also liaises regularly with its regional schools and technical and further education to influence aspirations towards higher education along the same lines as the project example briefly described here.

Teacher education student support

Teacher education reform in Australia, England and the United States has been and continues to be a key focus in terms of growing economic advantage (Duquette, 1993; Feiman-Nemser, 2001; Grant & Koskela, 1986). Renewed emphasis on the relationship between theory and practice signals a significant push for more demonstrable links within that relationship (Darling-Hammond & Bransford, 2005). In this vein, pre-service teacher education programs must strive to renew their purpose and curriculum so as to meet external accreditation and accountability parameters, while at the same time remaining cognisant of student expectations (Groundwater-Smith, Deer, Sharp, & March, 1997; Ramsey, 2000). The development of professional identity is understood to be a key outcome of such a journey that is preparing global educators for contemporary learning contexts (Noble & Henderson, 2008).

Following the introduction of the reconceptualised undergraduate education programs as previously discussed, *Education Commons* was developed as a site of possibility, aimed at addressing professional identity and connectedness in a way that provides mutual benefit for all stakeholders, developing and growing students' sense of agency and their capacity to move within and between multiple identities (from 'student' to 'professional educator'). This notion of a *decanting space* endeavours to establish sustainable social and professional networks that will continue as the students move from the university into the teaching profession. Through opportunities for critical reflection and mentoring, Education Commons is perceived to strengthen teacher education students personally and professionally and to develop closer collaborative partnerships between the Faculty of Education and professional associations in the region (including members of the Australian College of Education).

As an outcome of the initial pilot, it became apparent that a sense of place was a significant feature of the experience for key stakeholders. By bringing academics, experienced teachers including members of the teaching community, Teacher Professional Associations, students and university staff together in the faculty, Education Commons fosters discussion about personal and professional development issues with consideration being given to the multiple realities that characterise learning journeys and evolution as education professionals. Education Commons provides a forum for the development of supportive social networks and informal learning contexts that assist all to exhibit positive dispositions as lifelong learners throughout their experience from undergraduate studies and beyond to professional practice.

The difficulty of developing professional networks and therefore opportunity to expand one's professional identity can be seen as being compounded when students are located at a considerable distance from major metropolitan locations, which is where much of the centralised professional development opportunities exist most regularly. With many of our students studying at a distance from a physical campus, initiating opportunities for professional dialogue and networking has proved to be additionally challenging. Indeed, for many such students, isolation is a significant issue to be addressed (Noble & Henderson, 2008). We decided deliberately to move away from the potential for deficit discourses about distant student engagement and connection to the profession and instead elaborated an online platform to enable these students also to participate in this professional community of practice. In the same manner as the on-campus experience, panel sessions are videorecorded and edited before being uploaded to the virtual environment. Academic staff members, experienced teachers and other education professionals then engage with students in online forums to facilitate a process of critical reflection on the key issues arising from the stimulus video footage.

The Education Commons (Online) approach provides us with an opportunity to engage undergraduate and postgraduate students, academics, teachers, administrators and other education professionals in reflect on key emerging issues impacting on and in turn being influenced by the education sector. Therefore this 'between-course' learning space can be conceptualised as a site of possibility – presenting the possibility for the development of virtual social networks – that promotes personal resilience and connectedness to the profession from the outset of the learning journey to 'becoming a teacher'. It clearly presents opportunities for the promotion of human capital by means of contributing to individual and collective capital (in the form of knowledge and commitment to the profession). Moreover, the social and professional support aspects, in terms of sociability and civic engagement, cannot be overlooked.

Within this Education Commons space (both physical and virtual) participants are afforded the possibility of civic engagement and community development that moves beyond a mere human capital focus towards social capital building. Integral to this community space is a sense of agency for all participants, creating the space to interrogate the culture of teacher education, including both the formal and informal curriculum issues and elements, as well as to examine the connections to the field. Such a space has enabled the potential for beginning teacher education students to see entry to the profession from the outset of their degree rather than upon completion. We believe that it is through engagement in formal as well as informal learning spaces that these students will be better supported to balance the realities of 'being' a futures-focused teacher, becoming a site of possibility rather than one of potential pressure.

Doctoral education

At present the faculty of education at the authors' university has nearly 120 doctoral students enrolled, more than double the number of students two years ago and currently the largest number among the university's faculties. Most of those students are enrolled part-time and off-campus, with many of them living in other countries. The two doctoral programs are both research doctorates, with one providing an initial coursework component followed by dissertation or folio, and the other wholly by dissertation. The students' topics are mostly qualitative and traverse the gamut from early childhood education to school-based education to university and vocational learning and teaching and lifelong learning.

There are external and internal pressures on doctoral education in the faculty that potentially restrict the programs' capacity to exhibit and enhance social capital, although some of those pressures are designed to be helpful. For example, the university's office of research has engaged in a systematic and largely successful drive to professionalise doctoral study at the university and to standardise the processes and systems that support it. Similarly, while the Commonwealth Government's pressure for doctoral candidates to complete their study in minimum time has sometimes added to the stress of students, their supervisors and research administrators, the outcome has generally been positive, with students who had not been making progress having to choose between finalising and withdrawing from their programs. Internally the faculty has a relatively high proportion of beginning academics who are often enthusiastic about doctoral education but who lack experience at supervising doctoral students. Within the constraints of limited resources, particularly time, faculty and university administrators are giving as much support as they can, with university-wide workshops and a community of practice for doctoral supervisors currently under way.

With regard to the possibilities of the faculty's doctoral education contributing to the social capital of multiple individuals, groups and communities, there are several indicators of such a contribution. One indicator is the topics chosen by students for their dissertations. For example, Noble (2008) examined conceptions and experiences of workplace bullying in early childhood education and care contexts; Hawkins (2010) used participatory action research to investigate the capacity of children's literature to teach preschool children about notions of social justice; Hurley (2009) conducted research with mental health nurses in the United Kingdom about the impact of recent policy changes on their work and identities; Kehrwald (2007) explored the elaboration of social presence and learner support in text-based online learning environments; Reushle (2005) traced the enactment of transformative learning in a professional development program for online educators in Singapore; and Atwell (2006) initiated and evaluated a leadership training project in three rural school communities in Central Lombok, Indonesia. Despite their diversity, all these topics were of direct relevance to and engaged foursquare with the circumstances and needs of the respective communities and contexts in which they were located.

A second indicator of the faculty's doctoral education contributing to social capital is Morrow's (1999, p. 744) contention cited above that the concept "refers to sociability, social networks and social support, trust, reciprocity, and community and civic engagement." At one level this can be interpreted as referring to the mostly supportive relationships that surround doctoral candidates and that often make the difference between their completing and withdrawing from their programs, as the acknowledgments section of the dissertation or folio sometimes poignantly confirms. These are certainly important elements of the candidate's

social capital, including for those candidates who become doctoral supervisors in due course and draw on their own experiences of doctoral study to frame their approaches to supervision. At another level Morrow's definition can be inferred as highlighting candidates' generally much wider set of connections with research participants and stakeholders. Certainly education research that is posited as being ethically engaged and politically sensitive (Coombes, Danaher, & Danaher, 2004) is likely to exhibit a continuing association with those participants and stakeholders, with a view to ensuring that the findings of the results are communicated with them and that any benefits arising from those findings are shared appropriately with them. This indicator also denotes the networks of productive relationships that the candidate develops after graduation; as the Bradley Review (Commonwealth of Australia, 2008) noted, as well as becoming academics, "people with doctoral qualifications are also employed in other sectors, for example, in public and private research organisations" (p. 83).

A third indicator of doctoral education contributing to social education is directed at the institutional rather than the individual levels. Increasingly Australian universities are required to demonstrate their relevance to and engagement with their respective communities. For a regional university such as the one being discussed here, these communities range from the cities and towns in which its campuses are physically situated to the economic and geographical regions in which those cities and towns are located to the segment of the Australian state from which it takes its title to the other Australian places where its students live to the Australian economy and polity to which it contributes to the Asia Pacific and other regions of the world where its current and former students and staff members are resident.

In some ways the preceding paragraphs can be seen as applying to all university doctoral graduates, regardless of location. Yet in another, crucial sense the contribution by those graduates to the social capital of regional universities and their communities is distinctive and particularly significant because it is under threat. Certainly the reported response (Slattery, 2009) by the vice-chancellors of Australia's research intensive universities to the Bradley Review (Commonwealth of Australia, 2008) suggests that at least some of them undervalue that contribution. Yet the proposition that publicly funded research – and by implication doctoral education – should be restricted to a small number of elite universities ignores the direct and effective links between Australian regional universities and their multiple constituencies, as well as their ongoing contributions to social – and also human – capital in diverse communities throughout Australia and internationally.

Conclusion

It is clear from the preceding account that, in common with other university entities, contemporary faculties of education in Australia are located at the interface of a complex set of forces and relationships, as are regional universities, which are under increasing pressure to demonstrate their relevance and viability. Certainly the Bradley Review (Commonwealth of Australia, 2008) contains much of value for regional universities to consider and importantly recognises their importance. At the same time, the human capital discourse that underpins the Review as well as much of the current policy-making related to Australian universities potentially disadvantages and marginalises regional universities. By contrast, notions of social capital, with their focus on the resilience of smaller- and

larger-scale relationships and community engagement, are crucial to enhancing regional universities' survival and sustainability.

The three arenas of activity drawn from the authors' faculty of education at an Australian regional university and outlined in the previous section of the paper emerged as sites of pressure and possibility. On the one hand, the teacher education programs, the initiatives in teacher education student support and the developments in doctoral education all responded to larger challenges and opportunities that are sometimes not easily accommodated and addressed. On the other hand, all three sites exhibited action, agency and commitment on the part of faculty administrators, academic and professional staff members, students, members of the wider education profession and members of the faculty's multiple communities. In doing so, they demonstrated the capacity to build and expand social capital and to strengthen existing relationships and create new ones.

More broadly, this analysis highlights the centrality of the interplay between human and social capital in constructing these sites of pressure and possibility as well as in helping to futureproof Australian regional universities and their faculties of education. It is important to recognise the continuing influence of this interplay at the same time as positioning it as facilitative of new and innovative approaches to teacher education rather than as constraining and limiting. This is the case also for regional Australian futures writ large: pressures such as the human capital discourse need to be set beside the possibilities of social capital development and application.

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References

- Atwell, A. (2006, August). *The impact of a leadership training program on school based management and school community action in Praya Barat Daya, Lombok, Indonesia*. Unpublished Doctor of Education folio, Faculty of Education, University of Southern Queensland, Toowoomba, Qld.
- Australian Council of Deans of Education. (1998). *Preparing a profession: Report of the national standards and guidelines for initial teacher education project*. Canberra, ACT: Author.
- Becker, S. O., & Woessmann, L. (2009, May). Was Weber wrong? A human capital theory of Protestant economic history. *The Quarterly Journal of Economics*, 124(2), 531–596.
- Bourdieu, P., & Wacquant, L. (1992). *An invitation to reflexive sociology*. Cambridge, UK: Polity Press.
- Committee for the Review of Teaching and Teacher Education. (2003). *Australia's teachers: Australia's future: Advancing innovation, science, technology and*

mathematics. Canberra, ACT: Department of Education, Science and Technology.

- Commonwealth of Australia. (1998, April). *Learning for life: Review of higher education financing and policy: Final report*. Canberra, ACT: Author. Retrieved from <http://www.dest.gov.au/archive/highered/hereview/herr.pdf>
- Commonwealth of Australia. (2008, December). *Review of Australian higher education: Final report*. Canberra, ACT: Author. Retrieved from http://www.deewr.gov.au/HigherEducation/Review/Documents/PDF/Higher%20Education%20Review_one%20document_02.pdf
- Coombes, P. N., Danaher, M. J. M., & Danaher, P. A. (Eds.). (2004). *Strategic uncertainties: Ethics, politics and risk in contemporary educational research*. Flaxton, Qld: Post Pressed.
- Daly, M., & Silver, H. (2008, December). Social exclusion and social capital: A comparison and critique. *Theory and Society*, 37(6), 537–566.
- Danaher, P. A. (2006, November). The social control–social capital debate about distance and online teacher education: Critical reflections on two courses at the University of Southern Queensland, Australia. *Journal of Open Learning and Teacher Education*, 1(3), 81–93.
- Danaher, P. A., Coombes, P. N., Danaher, G. R., & Anteliz, E. A. (2000, December). Life imprisonment or learning for life: Re-opening the social control–social capital debate about lifelong learning. *Re-Open*, 1(1), 14 pp???
- Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- D’Este, P., & Patel, P. (2007, November). University–industry linkages in the UK: what are the factors underlying the variety of interactions with industry? *Research Policy*, 36(9), 1295–1313.
- Dimov, D. P., & Shepherd, D. A. (2005, January). Human capital theory and venture capital firms: Exploring “home runs” and “strike outs”. *Journal of Business Venturing*, 20(1), 1–21.
- Duquette, C. (1993). A school-based teacher education program: Perceptions and attitudes. *Alberta Journal of Educational Research*, 39(4), 419–32.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), article 1. Retrieved from <http://jcmc.indiana.edu/vol12/issue4/ellison.html>
- Etzkowitz, H., & Klofsten, M. (2005, June). The innovating region: Toward a theory of knowledge-based regional development. *R&D Management*, 35(3), 243–255.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to sustain teaching. *Teachers College Record*, 103(6), 1013–1055.

- Grant, C., & Koskela, R. (1986). Education that is multicultural and the relationship between preservice campus learning and field experiences. *Journal of Educational Research*, 79(4), 197–204.
- Groundwater-Smith, S., Deer, C., Sharp, H., & March, P. (1997). The practicum as workplace learning: A multi-mode approach in teacher education. *Australian Journal of Teacher Education*, 21(2), 21–29.
- Hawkins, K. A. (2010, January). *A cry to teach for social justice: Linking early childhood education, participatory action research and children's literature*. Unpublished Doctor of Philosophy dissertation, Faculty of Education, University of Southern Queensland, Toowoomba, Qld.
- House of Representatives Standing Committee on Education and Vocational Training. (2007). *Top of the class: Report on the inquiry into teacher education*. Canberra, ACT: The Parliament of the Commonwealth of Australia.
- Hurley, J. M. (2009, June). *Mental health nurse identity at the interface of psychological therapies: Commencing the journey toward emotionally intelligent nurse training*. Unpublished Doctor of Philosophy dissertation, Faculty of Education, University of Southern Queensland, Toowoomba, Qld.
- Kehrwald, B. A. (2007). *Social presence and learner support: Understanding learners' experiences with mediated social processes in text-based online learning environments*. Unpublished Doctor of Philosophy dissertation, Faculty of Education, University of Southern Queensland, Toowoomba, Qld.
- Kilpatrick, S., Jones, T., & Barrett, S. (2006, July). Learning through research: A regional university and its community. *International Journal of Pedagogies and Learning*, 2(2), 36–49.
- Labonte, R. (1999, August). Social capital and community development: *Practitioner emptor*. *Australian and New Zealand Journal of Public Health*, 23(4), 430–433.
- Leeder, S., & Dominello, A. (1999, August). Social capital and its relevance to health and family policy. *Australian and New Zealand Journal of Public Health*, 23(4), 424–429.
- Lundvall, B-A. (2008). Higher education, innovation, and economic development. In J. Y. Lin & B. Pleskovic (Eds.), *Annual World Bank conference on development economics—regional 2008: Higher education and development* (pp. 201–228). Washington, DC: International Bank for Reconstruction and Development/World Bank. Retrieved from <http://website1.wider.unu.edu/lib/pdfs/WB-ACDE-Regional-Higher-Education-and-Development-2008.pdf#page=210>
- Martin, L. H. (Chair). (1964). *Committee on the future of tertiary education in Australia report*. Canberra, ACT: Australian Government Publishing Service.
- McConachie, J., & Simpson, J. (2003). Social entrepreneurship: An Australian university transforms a regional community through diversity and innovation. *Queensland Journal of Educational Research*, 19(2), 100–118.

- McDonald, J. (2006, July). Balancing the ‘town and gown’: The risky business of creating youth theatre in regional Queensland. *International Journal of Pedagogies and Learning*, 2(2), 6–13.
- Mlcek, S. (2009, August). Providing post-compulsory education options through ‘new-look’ rural partnerships. *Rural Society*, 19(2), 106–117.
- Morgan, K. (2007). The learning region: Institutions, innovation and regional renewal. *Regional Studies*, 41(S1), S147–S159.
- Morrow, V. (1999, November). Conceptualising social capital in relation to the well-being of children and young people: A critical review. *The Sociological Review*, 47(4), 744–765.
- Mueller, P. (2006, December). Exploring the knowledge filter: How entrepreneurship and university-industry relationships drive economic growth. *Research Policy*, 35(10), 1499–1508.
- Murray, K. (Chair). (1957). *Committee on Australian Universities report*. Canberra, ACT: Australian Government Publishing Service.
- Noble, K. (2008). *The incidence and prevalence of workplace bullying in early childhood education and care contexts: The conceptions of bullying*. Doctor of Philosophy dissertation, Faculty of Education, University of Southern Queensland, Toowoomba, Qld.
- Noble, K., & Henderson, R. (2008). Engaging with images and stories: Using a learning circle approach to develop agency of beginning “at-risk” preservice teachers. *Australian Journal of Teacher Education*, 33(1), 1–16.
- Preston, A. (1997, March). Where are we now with human capital theory in Australia? *Economic Record*, 73(220), 51–78.
- Ramsey, G. (2000, November). *Quality matters: Revitalising teaching: Critical times, critical choices: Report of the review of teacher education*. Sydney, NSW: New South Wales Department of Education and Training.
- Reushle, S. E. (2005). *Inquiry into a transformative approach to professional development for online educators*. Unpublished Doctor of Education dissertation, Faculty of Education, University of Southern Queensland, Toowoomba, Qld.
- Schirato, T. (2006, July). Australian regional universities and the idea of the university. *International Journal of Pedagogies and Learning*, 2(2), 50–59.
- Senate Employment, Education and Training Reference Committee. (1998). *A class act: Inquiry into the status of the teaching profession*. Canberra, ACT: Author.
- Slattery, L. (2009, February 18). Bradley review prompts Go8 ire. *The Australian*. Retrieved from <http://www.theaustralian.com.au/news/bradley-review-prompts-go8-ire/story-e6frgcoo-1111118881847>
- Smith, M. H., Beaulieu, L. J., & Seraphine, A. (2010). Social capital, place of residence, and college attendance. *Rural Sociology*, 60(3), 363–380.

- Smyth, J., & Down, B. (2004). Beyond the divide: Individual, institutional and community capacity building in a Western Australian regional context. *Education in Rural Australia*, 14(2), 54–68.
- Steele, F. (2009). *Knowledge networks, secondary schools and social capital*. Unpublished Doctor of Philosophy dissertation, Centre for Education Research, University of Western Sydney, Sydney, NSW.
- Tödtling, F., & Trippel, M. (2005, October). One size fits all?: Towards a differentiated regional innovation policy approach. *Research Policy*, 34(8), 1203–1219.
- Townsend, R., & Delves, M. (2009, August). Tree changes or wholesale changes: The role of adult education in transitions in regional life. *Rural Society*, 19(2), 96–105.